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Snow Surveyors Climbing to a Snow Course

FEDERAL-STATE COOPERATIVE
X SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR OREGON

FEBRUARY 1, 1946

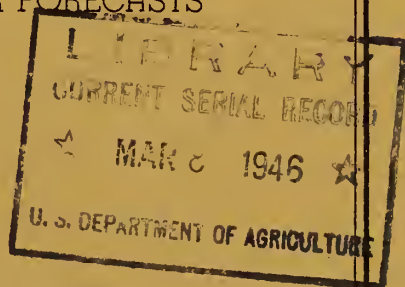
By

Division of Irrigation, Soil Conservation Service

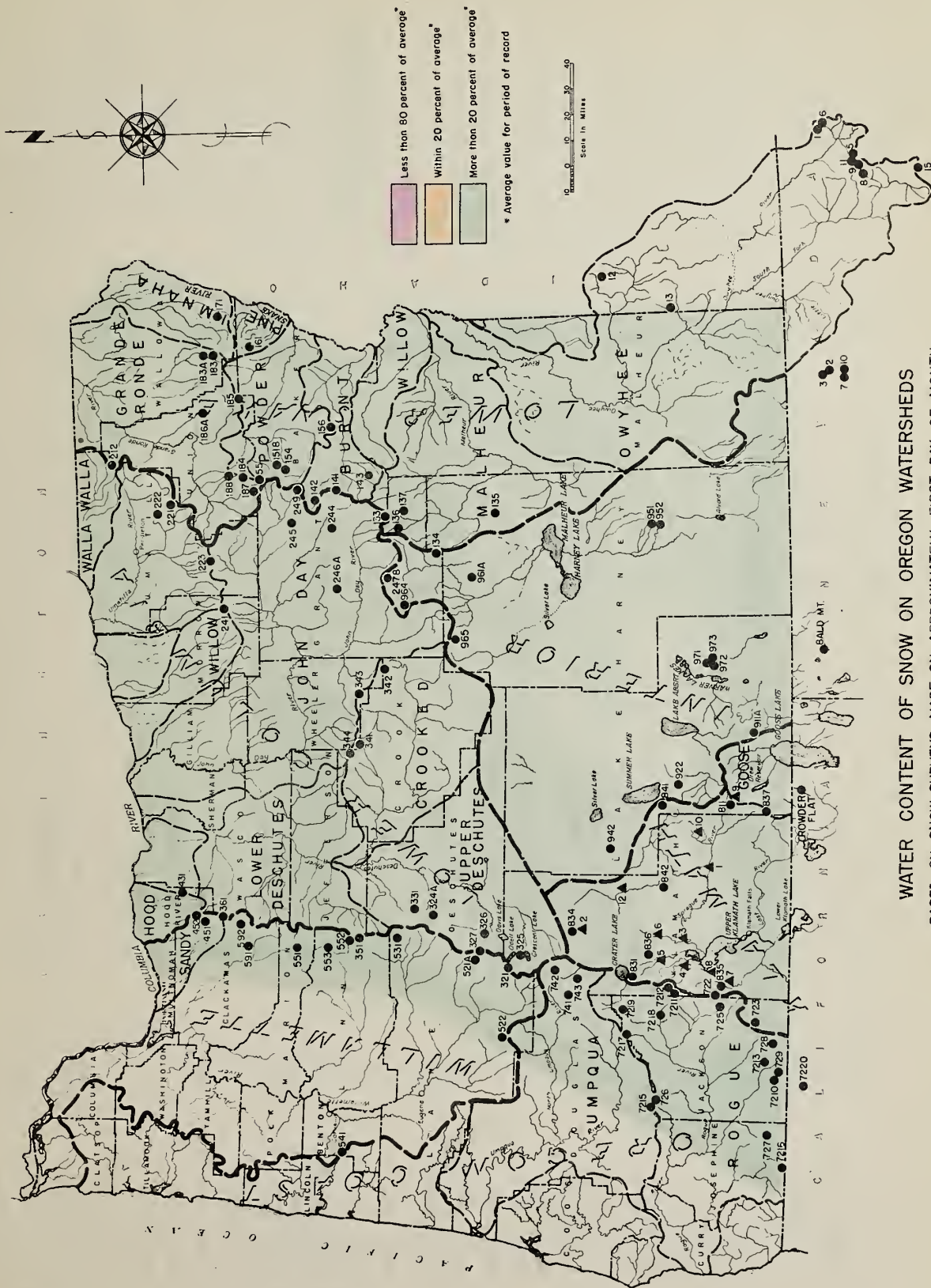
United States Department of Agriculture

and

Oregon Agricultural Experiment Station



Data included in this report were obtained by the agencies named above in cooperation with the Oregon State Engineer, U. S. Forest Service, National Park Service and other Federal, State and local organizations.



WATER CONTENT OF SNOW ON OREGON WATERSHEDS
 BASED ON SNOW SURVEYS MADE ON APPROXIMATELY FIRST DAY OF MONTH

(Valley Lands Not Necessarily Included)

INDEX TO SNOW COURSES

Number	Name	Elev.	Number	Name	Elev.	Number	Name	Elev.	Number	Name	Elev.
UPPER COLUMBIA DRAINAGE											
Lower Snake in Oregon											
OWYHEE RIVER											
Rev.1	Big Bend	6800	212	Tollgate	5070	551	Breitenbush	2325	942	Silver Creek	4900
Rev.2	Buckskin, Lower	6800	UMATILLA RIVER								
Rev.3	Buckskin, Upper	8200	222	Emigrant Springs	3925	552	Cascade Summit	4880	INTERIOR DRAINAGE		
952	Fish Creek	7900	223	Lucky Stride	5050	553	Charlton Lake	4750	SILVER LAKE		
Rev.5	Fry Canyon	6800	221	Meacham	4300	551	Hogg Pass	4755	CHEWATUCAN RIVER		
Rev.6	Gold Creek Ranger Ste.	6600	212	Tollgate	5070	553	McKenzie	4800	922	Mill Creek	6200
Rev.7	Granite Peak	8600	JOHN DAY RIVER								
Rev.8	Jack Creek, Lower	7000	241	Arbuckle Mountain	5400	723	Ryatt Prairie Reservoir	4900	HARNEY BASIN		
Rev.9	Jack Creek, Upper	7800	246A	Beech Creek Summit	4800	835	Lake of the Woods No. 1	4960	973	Dear Creek	6670
Rev.10	Martin Creek	7000	133	Blue Mountain Spring	5900	811	Quartz Mountain	5320	952	Fish Creek	7900
Rev.11	Rodeo Flat	7000	141	Blue Mountain Summit	5098	722	Billie Creek Divide	6018	971	Hart Mountain	6350
Ida.12	Silver City	6400	244	Dixie Springs	6650	811	Chemult No. 1	4760	961A	Idylwild Park	5200
Ida.13	Silvies	6900	249	Gold Center	5340	7212	Seven Lakes No. 2	6200	964	Izee Summit	5293
Rev.15	South Mountain No. 2	6340	964	Izee Summit	5293	837	Strewberry	5600	134	Rock Spring	5100
Taylor Canyon		5200	245	Olive Lake	6000	841	Sumner Rim	7200	951	Silvies	6900
MALHEUR RIVER											
133	Blue Mountain Spring	5900	965	Snow Mountain	6300	842	Taylor Butte	5100	965	Snow Mountain	6300
137	Crane Prairie	5575	247B	Sterr Ridge	5150	Starr Ridge					
136	Lake Creek	5120	WARNER LAKE								
134	Rock Spring	5100	Camas Creek								
135	Stinking Water	4800	GUANO LAKE								
BURNT RIVER											
143	Barney Creek	5950	Bald Mountain								
141	Blue Mountain Summit	5098	Guano Creek								
156	Doolley Mountain	5430	WEST COAST DRAINAGE								
142	Tipton	5100	UMPUQUA RIVER								
POWDER RIVER											
155	Anthony Lake	7125	911A	Camas Creek	5720	522	Champion	4500	743	Diamond Lake	5315
154	Bourne	5800	811	Quartz Mountain	5320	726	Gooleway Gap	3000	725	Gooleway Mountain	3750
156	Doolley Mountain	5430	837	Strewberry	5600	7215	N.Umpqua near Lake Creek	4215	742	Trap Creek	3800
151B	Ellertson Meadows	5400	Whaleback								
249	Gold Center	5340	RODUE RIVER								
184	Summit Springs	6000	Althouse								
185	Taylor Green	5740	Annie Spring								
PINE CREEK											
161	Schneider Meadows	5400	Big Red Mountain								
IMNABA RIVER											
171	Coverdale	4250	Billie Creek Divide								
GRANDE RONDE RIVER											
183	Aneroid Lake	7480	Fish Lake								
183A	Aneroid Lake No. 2	7000	1	Beatty	4300	726	Gooleway Gap	3000	725	Gooleway Mountain	3750
185	Anthony Lake	7125	2	Chemult	4761	727	Grayback Peak	6000	7215	Grayback Peak	6000
188	Beaver Reservoir	5340	3	Chiloquin	4187	723	Hyatt Prairie Reservoir	4900	727	Hyatt Prairie Reservoir	4900
187	Camp Carson	5970	4	Crystel	4200	720	Little Red Mountain	6500	725	Little Red Mountain	6500
186A	Moss Spring	5850	5	Fort Klamath	4150	7210	Scragg Mountain	6200	7220	Scragg Mountain	6200
184	Summit Springs	6000	6	Kirk	4533	7211	Seven Lakes No. 1	6800	7211	Seven Lakes No. 1	6800
185	Taylor Green	5740	7	Lake of the Woods	4960	7212	Seven Lakes No. 2	6200	7212	Seven Lakes No. 2	6200
212	Tollgate	5070	8	Pellicen	4200	7219	Silver Burn	3720	7219	Silver Burn	3720
INDEX TO THE CALIFORNIA OREGON POWER COMPANY SNOW WATER STATIONS											
KLAMATH LAKE BASIN											
1	Beatty	4300	9	Quartz Mountain	5504	728	Siskiyou Summit	4630	7218	South Fork Canal	3500
2	Chemult	4761	9	Quartz Mountain	5504	7213	Wegner Butte	6900	7213	Wegner Butte	6900
3	Chiloquin	4187	9	Quartz Mountain	5504	7217	Whaleback	5140	7217	Whaleback	5140
4	Crystel	4200	9	Quartz Mountain	5504						
5	Fort Klamath	4150	9	Quartz Mountain	5504						
6	Kirk	4533	9	Quartz Mountain	5504						
7	Lake of the Woods	4960	9	Quartz Mountain	5504						
8	Pellicen	4200	9	Quartz Mountain	5504						
9	Quartz Mountain	5504	9	Quartz Mountain	5504						
10	Richardson Ranch	4800	9	Quartz Mountain	5504						
12	Yamsey	4600	9	Quartz Mountain	5504						
GOOSE LAKE BASIN											
9	Quartz Mountain	5504	9	Quartz Mountain	5504						

February 1, 1946

WATER SUPPLY OUTLOOK

The annual mid-winter snow surveys indicate Oregon's 1946 water supply prospects are likely to be very good. Reservoir storages, with few exceptions, are well above normal for this date. If normal conditions of snow accumulation prevail during the next two months, water supplies will be comparable to those of 1943.

Mountain snow cover, as of February 1, is considerably above average on all snow courses in Oregon. Normal or above-normal additions to the snow-pack during February and March will produce stream flow comparable to 1943 and may be of flood proportions on some streams if the snow water is suddenly released by high temperatures. However, if the February and March snow-fall is deficient, the present snow cover will likely provide an adequate 1946 water supply.

Watershed soils are generally well saturated and not frozen, a condition favoring sustained run-off from the spring snow-pack.

Total water stored in all reservoirs is 46 percent greater than of similar date last year, 6 percent greater than in 1944, 15 percent less than in 1943, and is 15 percent greater than average. More than half of Oregon's reservoirs are half full or better.

Precipitation in Oregon valleys accumulated since October 1 is generally above normal. The Wallowa Mountain area is an exception with precipitation about 92 percent normal for this period.

Preliminary forecasts of April-September stream flow, based on existing mountain snow cover, and on the assumption that snow cover increase during February and March will be average, indicate a state-wide run-off of ample proportions.

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The following preliminary run-off forecasts are based on present mountain snow cover and on the assumption that average February and March increase of snow cover will occur. Greater or less than average increase in mountain snow cover during the next two months will correspondingly modify these estimates:

Area	Stream	Apr.-Sept., incl., Stream Flow Expectancy as of Feb. 1, 1946	
		As % of Avg. 1929-44	As % of Last Year
Northcentral	W. Fk. Hood River near Dee (438)	143 c	a
Umatilla- Walla Walla	S.Fk. Walla Walla R. nr. Milton Station (214)	122 f	a
	Umatilla R. at Pendleton (223)	133	a
Northeastern	Grande Ronde R. nr. LaGrande (1816)	122	a
	East Fk. Wallowa R. (1822 + 1823)	140	a
	Hurricane Cr. near Joseph (1814)	134	a
	Lostine R. near Lostine (1810)	128	a
	Bear Creek near Wallowa (1815)	112	a
Eastern	N. Fk. Malheur R. at Beulah (139)	132	a
	Malheur R. near Drewsey (1320)	126	a
	Strawberry Cr. nr. Prairie City (2434)	116 e	a
Harney Basin	Silvies River near Burns (966)	155	a
Central	Tumalo Cr. & C. S. Canal (338a)	122	a
	Squaw Cr. near Sisters (335)	127	a
	Odell Cr. near Crescent (3212)	g	
	Crescent Lake Net Inflow	g	
	Ochoco Reservoir Net Inflow	188	a
Southcentral	Deep Creek above Adel (9127)	121 b	a
Klamath Basin	Upper Klamath Lake Net Inflow	181	173
Southern	Rogue River above Prospect (722)	139	a
	Fourmile Lake Not Inflow	135	a
	N. Fk. Little Butte Cr. below Fish Lake (Natural flow) (7230)	129	a
	Hyatt Prairie Reservoir Net Inflow	149	a
	Applegate R. near Ruch (7212)	162	a
	N. Umpqua R. below Lake Cr. (7419)	117	a
	N. Umpqua R. at Toketoe Falls (7414)	121	a
	Clearwater R. above Trap Cr. (7420)	116	a
Willamette Valley	McKenzie R. at McKenzie Bridge (534)	125	a
	McKenzie R. near Vida (535)	130	a
	Mid. Fk. Willam. R. at Eula (512)	g	

a - 1945 Discharge record not available

b - April-June rather than April-Sept.

c - 1933-44

d - 1934-44

e - 1931-44

f - 1932-44

g - Data delayed

[illegible]

COMPARISON OF SNOW COVER AS OF FEBRUARY FIRST WITH THAT OF PREVIOUS YEARS

Snow-stored water now present above 5,000 feet:

Snow-stored water now present above 5,000 feet:		Snow-stored water now present from 2,000-5,000 feet:	
As percent of that present one month ago	-- 144	As percent of that present one month ago	-- 166
As percent of that present one year ago	-- 305	As percent of that present one year ago	-- 490
As percent of that present two years ago	-- 298	As percent of that present two years ago	-- 328
As percent of average	-- 178	As percent of average	-- 204

Snow water content on 100 percent of all measured courses is greater than at this time in 1945, and in 92 percent of the comparisons, is greater than on about February 1, 1944. Snow water content on 87 percent of all measured courses is greater than average.

Given below is a tabulation showing inches snow-stored water for the February 1 record period on eleven scattered snow courses of greatest record length. The superior snow pack of February 1, 1946, as compared with that of the same date in most earlier years is evident.

Snow Water Content (Inches) as of About February 1

River Basin	Deschutes	Umatilla	Walla Walla	Burnt River	Malheur- John Day	Crooked	Goose Lake	Klamath	Rogue	Klamath- Annie Spring	Umpqua Lake
Snow Course	Three Creeks	Meacham	Toll-gate	Walla	Blue Mt. Springs	Ochoco	Quartz Mtn.	Chemult			
Year	Meadows			Tipton		Mdws.					
1929	11.2	9.2	-	10.1	-	4.3	4.0	6.5	20.3		8.9
1930	13.1	3.5	-	3.8	4.4	3.8	6.0	4.6	19.5		5.5
1931	8.1	6.2	14.1	8.2	3.6	5.6	4.0	6.1	N.R.		8.4*
1932	23.4	9.3	23.7	8.7	13.7	10.0	6.9	12.8	22.3		26.2
1933	N.R.	5.6	N.R.	N.R.	13.0	6.5	5.9	11.1	N.R.		27.5
1934	8.5	0.5	12.5	N.R.	N.R.	N.R.	1.0	T	N.R.		5.6
1935	15.8	5.6	18.2	N.R.	11.0	9.4	7.7	8.6	33.4		7.6
1936	N.R.	11.2	27.8	N.R.	13.4	13.5	11.3	9.4	37.2		12.0
1937	18.5	9.3	16.6	N.R.	8.2	6.1	4.1	7.0	N.R.		15.6
1938	8.2	2.1	9.7	4.5	9.0	N.R.	N.R.	4.1	22.8		7.9
1939	10.1	4.0	14.1	6.8	7.4	5.7	2.2	5.3	26.5		12.2
1940	4.3	2.3	5.9	3.1	3.6	1.8	T	5.5	20.5		3.1
1941	6.8	4.0	14.1	8.7	13.4	8.6	5.0	8.1	36.8		10.5
1942	6.6	3.5	7.0	4.8	6.8	5.9	3.8	6.3	18.1		6.8
1943	N.R.	10.6	28.8	13.4	23.0	13.7	9.4	20.5	40.8		29.8
1944	4.1	3.1	8.4	3.8	4.0	2.7	2.3	4.2	14.3		7.4
1945	1.6	4.6	8.2	8.2	4.9	4.7	4.8	3.7	13.4		4.5
1946	20.0	9.6	27.1	9.2	14.1	12.8	7.9	13.9	42.2**		26.1

Greatest Feb. 1 water content is underscored. N.R.—No report T — Trace * (Feb. 15) ** (Jan. 17)

STATUS OF SNOW COVER AS OF FEBRUARY FIRST
Summary of Snow Survey Data
by Watersheds as of About February First

Stream Basin	Number Of Snow Courses Averaged	Average Water Depth in Snow Cover (Inches)			Yrs. of Rec- ord	1946 Snow Water Depth (Inches) as Percent of that in		
		1946	1945	1944		1945	1944	Avg.
Malheur River	2	10.0	3.8			263		
	2	10.0		3.0			333	
	2	10.0			6.9 (10-15)			145
Burnt River	3	9.5	5.5			173		
	3	9.5		3.0			317	
	3	9.5			6.0 (7-12)			153
Powder River	3	15.9	7.1			224		
	2	10.0		3.0			333	
	3	15.9			9.5 (6-12)			167
Pine Creek	1	30.2	9.8			308		
	1	30.2		9.8			308	
	1	30.2			17.6 (8)			172
Grande Ronde River	7	20.6	8.3			248		
	7	17.8		6.7			266	
	8	19.0			11.8 (3-17)			161
Walla Walla River	1	27.1	8.2			330		
	1	27.1		8.4			323	
	1	27.1			14.9 (14)			182
Umatilla River	4	14.3	5.6			255		
	4	14.3		4.4			325	
	4	14.3			8.2 (7-17)			174
Willow Creek	1	12.4	5.4			230		
	1	12.4		3.8			326	
	1	12.4			7.0 (16)			177
John Day River	7	11.2	3.4			329		
	7	11.2		3.4			329	
	7	11.2			6.1 (9-16)			184
Deschutes River	2	31.0	5.3			585		
	3	24.8		6.6			376	
	3	24.8			10.7 (5-14)			232
Crooked River	3	10.2	3.6			283		
	3	10.2		1.9			537	
	3	10.2			4.8 (8-16)			212

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(Continued)

Stream Basin	Number Of Snow Courses Averaged	Average Water Depth in Snow Cover (Inches)				Yrs. of Rec- ord	1946 Snow Water Depth (Inches) as Percent of that in		
		1946	1945	1944	Avg. Past Yrs. of Record		1945	1944	Avg.
Sandy River	2	45.4	6.4				711		
	2	45.5		10.0				455	
	2	45.5			16.9	(8)			269
Clackamas River	1	16.1	2.7				596		
	1	16.1		3.7				435	
	1	16.1			7.7	(8)			209
Willamette River	6	20.2	3.6				561		
	6	20.2		4.0				505	
	6	20.2			8.8	(5-8)			230
Harney Basin	4	7.6	2.4				317		
	4	7.6		2.1				362	
	6	6.2			4.0	(4-13)			155
Silver Lake Basin	1	4.9	0.0				-		
	1	4.9		1.6				306	
	1	4.9			2.6	(6)			188
Warner Lake	1	9.3	5.0				186		
	1	9.3		3.8				245	
	1	9.3			6.8	(7)			137
Guano Lake	-	-	-				-		
	-	-		-				-	
	1	4.6			4.6	(4)			100
Umpqua River	4	14.4	2.3				626		
	5	20.6		5.9				349	
	5	20.6			9.2	(7-9)			224
Upper Rogue River	10	13.2	3.9				338		
	11	16.1		6.3				256	
	11	16.1			9.0	(7-14)			179
Applegate River	3	19.1	4.7				406		
	3	19.1		11.0				174	
	3	19.1			13.0	(10)			147
Illinois River	2	10.3	2.0				515		
	2	10.3		6.1				169	
	2	10.3			8.0	(8-10)			129
Klamath Lake Basin	17*	11.7	3.4				344		
	16*	12.0		4.6				261	
	17*	11.7			6.5	(8-19)			180
Goose Lake Basin	3*	9.3	5.0				186		
	3*	9.3		3.1				300	
	3*	9.3			5.6	(7-16)			166

* Including Copco water measurement stations.

STATUS OF RESERVOIR STORAGE AS OF FEBRUARY FIRST

In the following tabulation, water storage in acre feet in important Oregon reservoirs as of about February 1, 1946, is compared with storage as of approximately the same date in 1945, 1944, 1943, and with 10 year average, 1936-45.

Storage Reservoir	Stream Basin	Capacity Acre Ft.	Acre Feet in Storage				10 Year Average
			About 2-1-46	About 2-1-45	About 2-1-44	About 2-1-43	
Agency Valley	Malheur	60,000	38,740	41,880	40,762	24,300	32,631
Antelope	Owyhee	36,550	No report	3,245	0	No report	4,025 ^h
Clear Lake	Lost River	440,240 ^b	252,250 ^b	228,310 ^b	293,340 ^b	252,030 ^b	182,338 ^b
Cold Springs	Umatilla	50,000	30,750	14,000	26,000	36,500	25,717 ⁱ
Cottage Grove	Willamette	33,090 ^{b,f}	0	210 ^b	0 ^c	0 ^c	1,114 ^{b,j}
Cottonwood	Goose Lake	4,160	No report	355	0	0 ^c	57 ^k
Crane Prairie	Deschutes	50,000	36,320	24,240	43,720	30,000	30,006
Crescent Lake	Deschutes	80,000	30,070	31,000	51,790	30,000	32,462
Drew Creek	Goose Lake	62,500	No report	28,500	35,000	42,794	34,427
Emigrant Gap	Rogue	8,200	8,200	1,590	1,534	5,628 ^c	4,526
Fern Ridge	Willamette	101,200 ^{b,f}	1,000 ^b	1,720 ^b	0 ^c	72,550 ^b	22,590 ^{b,l}
Fish Lake	Rogue	7,720	3,740	3,196	6,886	4,401	4,368
Fourmile Lake	Klamath ^d	14,000	4,886	6,741	11,516	3,802	7,034
Gerber	Klamath ^d	94,000 ^b	31,610 ^b	34,220 ^b	44,650 ^b	39,320 ^{b,c}	39,415 ^b
Hyatt Prairie	Klamath ^d	16,000	1,885	1,630	6,513	8,607	5,182
McKay	Umatilla	74,000	36,050	21,440	36,800	51,720 ^c	26,369
Ochoco	Crooked	46,000	36,940	1,140	22,980	37,920 ^c	11,326
Owyhee	Owyhee	716,000 ^b	561,010 ^b	403,030 ^b	481,330 ^b	623,640 ^{b,c}	497,613 ^b
Thief Valley	Powder	17,400	No report	8,464	8,954	15,140	10,902 ^m
Unity	Burnt	25,260	11,410	10,370	5,232	9,465	9,552 ⁿ
Upper Klamath	Klamath	583,900 ^g	394,360 ^g	187,800 ^g	305,600 ^g	466,300 ^{g,c}	353,022 ^g
Wallowa Lake	Wallowa	40,920	11,160	9,759	30,820	25,240	18,971
Warm Springs	Malheur	190,000	80,380	35,310	111,760	161,000	81,404
Wickiup	Deschutes	180,000	39,000 ^a	45,000	0	4,700	16,567 ^j
Willow Creek	Malheur	26,000	No report	10,600 ^e	No report	11,600	4,436 ^p

a-Estimated

b-Available for use

c-Water being by-passed to provide space for anticipated inflow

d-By ditch to Rogue River side

e-Approximate

f-Storage space reserved for flood control during high water season

g-Based on gage zero elev. of 4135.0

h-Excl. '36, '43

i-1940-45

j-1943-45

k-Excl. '37, '38, '42

l-1942-45

m-1937-45

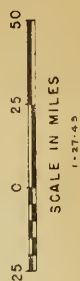
n-1939-45

p-Excl. '36, '42, '44

IMPORTANT OREGON RESERVOIRS



RESERVOIR NAME	NUMBER
Agency Valley	1354
Antelope	1230
Clear Lake	823
Clear Lake	3681
Cold Springs	2281
Cottage Grove	5220
Caltonwood	8115
Crone Prairie	3220
Crescent Lake	322
Drew Creek	814
Emigrant Gap	7267
Fern Ridge	5413
Fish Lake	7237
Four Mile Lake	8321
Gerber	8215
Hyatt Prairie	8320
McKay	2231
Ochoco	3420
Owyhee	1234
Rack Creek	3683
Thief Valley	1514
Thompson Valley	9411
Unity	1415
Upper Klamath Lake	832
Walla Walla Lake	186
Warm Springs	1322
Wickiup	3137
Willow Creek No 3	1323



STATUS OF VALLEY PRECIPITATION AS OF OCTOBER 1 TO DATE

Month	Oct.		Nov.		Dec.		Jan.		Period	
Section	P	D	P	D	P	D	P	D	P	D
S.E.	0.70	-0.01	1.31	+0.14	2.04	+1.01	0.8	-0.5	4.85	+0.64
S.C.	1.24	+0.27	2.53	+0.51	2.93	+0.91	1.7	-0.2	8.40	+1.49
N.C.	0.96	+0.06	2.96	+1.16	3.48	+1.78	1.6	+0.2	9.00	+3.20
Col. Riv.	0.66	-0.34	2.38	+0.69	2.64	+0.91	1.5	-0.2	7.18	+1.06
Wal. Mts.	0.52	-0.92	2.36	+0.48	2.41	+0.54	0.8	-0.6	6.09	-0.50
Blue Mts.	0.72	-0.60	3.01	+0.77	3.04	+0.74	1.5	-0.3	8.27	+0.61
Southern	1.54	-0.38	6.66	+3.43	5.04	+1.20	4.3	+0.8	17.54	+5.05
Willamette	2.13	-1.98	13.99	+6.28	9.55	+1.04	6.7	-1.1	32.37	+4.24
Area	1.06	-0.49	4.40	+1.68	3.89	+1.02	2.4	-0.2	11.71	+1.97

P - Inches precipitation.

D - Inches departure from normal.

S.E. - Southeastern Oregon range lands, Harney and Malheur Counties.

S.C. - Southcentral Oregon range lands, Lake County and Klamath County, except the Cascade Mountains.

N.C. - Northcentral Oregon wheat and range lands, Crook, Deschutes, Jefferson, Wheeler and part of Grant Counties.

Col. Riv. - Columbia River area, wheat and range lands, Gilliam, Morrow, Sherman, Wasco and part of Umatilla Counties.

Wal. Mts. - Wallowa Mountain area, forest and range lands, Wallowa and part of Baker County.

Blue Mts. - The Blue Mountain forest and range area, Union and parts of Baker, Grant and Umatilla Counties.

Southern - Southern Oregon irrigated section, Jackson and Josephine Counties.

Willamette - Parts of Polk, Benton, Yamhill, Washington, Lane and all of Linn, Marion, Clackamas and Multnomah Counties.

Note: Data for the last month shown above are preliminary only, as they are based on a few stations only. Data for earlier months have been corrected to include all the stations in Climatological Data for the area.

THE HISTORY OF THE UNITED STATES OF AMERICA

Year	1776	1777	1778	1779	1780	1781	1782	1783	1784	1785	1786	1787	1788	1789	1790	1791	1792	1793	1794	1795	1796	1797	1798	1799	1800
Population	2,500,000	2,600,000	2,700,000	2,800,000	2,900,000	3,000,000	3,100,000	3,200,000	3,300,000	3,400,000	3,500,000	3,600,000	3,700,000	3,800,000	3,900,000	4,000,000	4,100,000	4,200,000	4,300,000	4,400,000	4,500,000	4,600,000	4,700,000	4,800,000	4,900,000
Exports	\$10,000,000	\$11,000,000	\$12,000,000	\$13,000,000	\$14,000,000	\$15,000,000	\$16,000,000	\$17,000,000	\$18,000,000	\$19,000,000	\$20,000,000	\$21,000,000	\$22,000,000	\$23,000,000	\$24,000,000	\$25,000,000	\$26,000,000	\$27,000,000	\$28,000,000	\$29,000,000	\$30,000,000	\$31,000,000	\$32,000,000	\$33,000,000	\$34,000,000
Imports	\$10,000,000	\$11,000,000	\$12,000,000	\$13,000,000	\$14,000,000	\$15,000,000	\$16,000,000	\$17,000,000	\$18,000,000	\$19,000,000	\$20,000,000	\$21,000,000	\$22,000,000	\$23,000,000	\$24,000,000	\$25,000,000	\$26,000,000	\$27,000,000	\$28,000,000	\$29,000,000	\$30,000,000	\$31,000,000	\$32,000,000	\$33,000,000	\$34,000,000
Balance of Trade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Public Debt	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Revenue	\$10,000,000	\$11,000,000	\$12,000,000	\$13,000,000	\$14,000,000	\$15,000,000	\$16,000,000	\$17,000,000	\$18,000,000	\$19,000,000	\$20,000,000	\$21,000,000	\$22,000,000	\$23,000,000	\$24,000,000	\$25,000,000	\$26,000,000	\$27,000,000	\$28,000,000	\$29,000,000	\$30,000,000	\$31,000,000	\$32,000,000	\$33,000,000	\$34,000,000
Expenditure	\$10,000,000	\$11,000,000	\$12,000,000	\$13,000,000	\$14,000,000	\$15,000,000	\$16,000,000	\$17,000,000	\$18,000,000	\$19,000,000	\$20,000,000	\$21,000,000	\$22,000,000	\$23,000,000	\$24,000,000	\$25,000,000	\$26,000,000	\$27,000,000	\$28,000,000	\$29,000,000	\$30,000,000	\$31,000,000	\$32,000,000	\$33,000,000	\$34,000,000

The following table shows the population of the United States from 1776 to 1800. The population increased from 2,500,000 in 1776 to 4,900,000 in 1800. The exports and imports of the United States are also shown. The balance of trade was zero for all years. The public debt was zero for all years. The revenue and expenditure of the United States are also shown. The revenue and expenditure were equal for all years.

The following table shows the population of the United States from 1800 to 1820. The population increased from 4,900,000 in 1800 to 7,200,000 in 1820. The exports and imports of the United States are also shown. The balance of trade was zero for all years. The public debt was zero for all years. The revenue and expenditure of the United States are also shown. The revenue and expenditure were equal for all years.

The following table shows the population of the United States from 1820 to 1840. The population increased from 7,200,000 in 1820 to 12,300,000 in 1840. The exports and imports of the United States are also shown. The balance of trade was zero for all years. The public debt was zero for all years. The revenue and expenditure of the United States are also shown. The revenue and expenditure were equal for all years.

The following table shows the population of the United States from 1840 to 1860. The population increased from 12,300,000 in 1840 to 23,200,000 in 1860. The exports and imports of the United States are also shown. The balance of trade was zero for all years. The public debt was zero for all years. The revenue and expenditure of the United States are also shown. The revenue and expenditure were equal for all years.

The following table shows the population of the United States from 1860 to 1880. The population increased from 23,200,000 in 1860 to 39,300,000 in 1880. The exports and imports of the United States are also shown. The balance of trade was zero for all years. The public debt was zero for all years. The revenue and expenditure of the United States are also shown. The revenue and expenditure were equal for all years.

The following table shows the population of the United States from 1880 to 1900. The population increased from 39,300,000 in 1880 to 62,900,000 in 1900. The exports and imports of the United States are also shown. The balance of trade was zero for all years. The public debt was zero for all years. The revenue and expenditure of the United States are also shown. The revenue and expenditure were equal for all years.

STREAM BASINS		LOCATION		SNOW COVER MEASUREMENTS									
(Primary & Secondary & Snow Courses)	Oregon Number	Sec.	Twp.	Range	Elev.	About Feb. 1, 1946		Average Water Depth			Yrs. of rec- ord		
						Avg. Snow	Depth (In.)	Avg. Water Depth (In.)	One Month Ago (1-1-46)	One Year Ago (2-1-45)		Two Years Ago (2-1-44)	
<u>U P P E R C O L U M B I A D R A I N A G E</u>													
<u>L O W E R S N A K E I N O R E G O N</u>													
OWYHEE RIVER													
South Mountain No. 2	Idaho	35	7S	5W	6340	Measurement Delayed	9.2	6.3	2.2	7.7	5		
MALHEUR RIVER													
Blue Mountain Springs	133	21	15S	35E	5900	1-18 45.2	14.1	11.7	4.9	4.1	9.3	15	
Crane Prairie	137	24	16S	34E	5375	1-18 31.8	7.8	-	-	-	4.2	3	
Lake Creek	136	10	16S	33½E	5120	1-18 34.3	8.2	-	-	-	5.9	3	
Rock Spring	134	23	18S	32E	5100	1-27 27.3	6.0	5.0	2.7	1.8	4.5	10	
Stinking Water	135	33	21S	34E	4800	Measurement Delayed	-	-	2.5	2.2	3.5	8	
BURNT RIVER													
Blue Mountain Summit	141	6	12S	36E	5098	1-31 42.4	9.5	6.0	3.4	2.5	5.2	11	
Dooley Mountain	156	32	11S	40E	5430	1-30 33.7	9.8	7.5	4.8	2.8	5.8	7	
Tipton	142	34	10S	35½E	5100	1-28 41.4	9.2	-	8.2	3.8	7.0	12	
POWDER RIVER													
Anthony Lake	155	18	7S	37E	7125	2-2 75.4	27.8	16.2	12.9	-	15.6	6	
Bourne	154	33	8S	37E	5800	Measurement Delayed	-	-	4.0	4.6	9.2	10	
Dooley Mountain	156	32	11S	40E	5430	1-30 33.7	9.8	7.5	4.8	2.8	5.8	7	
Eilertson Meadows	151B	18	8S	38E	5400	1-22 37.6	10.1	-	3.7	3.2	7.1	12	
Gold Center	249	21	9S	36E	5340	Measurement Delayed	-	-	4.9	4.3	7.0	7	
PINE CREEK													
Schneider Meadows	161	35	6S	45E	5400	1-29 95.5	30.2	-	9.8	9.8	17.6	8	

STREAM BASINS

LOCATION

(Primary & Secondary
& Snow Courses)

Oregon
Number Sec. Twp. Range Elev.

SNOW COVER MEASUREMENTS

About Feb. 1, 1946

Avg. Snow Depth (In.)
Avg. Water Depth (In.)
Average Water Depth (Inches)
One Month Ago (1-1-46)
One Year Ago (2-1-45)
Two Years Ago (2-1-44)
Yrs. of record

GRANDE RONDE RIVER

Aneroid Lake No. 1	183	16	4S	45E	7480	1-26	84.6	29.1	-	12.8	12.2	17.8	16
Aneroid Lake No. 2	183A	16	4S	45E	7000	1-26	63.0	23.3	-	8.3	9.3	15.4	4
Anthony Lake	155	18	7S	37E	7125	2-2	75.4	27.8	16.2	12.9	-	15.6	6
Beaver Reservoir	188	8	5S	37E	5340	1-29	37.5	8.7	6.0	3.9	3.4	7.7	7
Camp Carson	187	33	6S	36E	5970	1-30	33.5	8.0	-	-	3.5	4.4	3
Meacham	221	24&25	1S	35E	4300	1-29	41.5	9.6	-	4.6	3.1	5.6	17
Moss Spring	186A	28	3S	41E	5850	1-31	71.2	18.7	5.5	7.6	7.0	12.7	8
Tollgate	212	32	4N	38E	5070	1-29	90.8	27.1	-	8.2	8.4	14.9	14

LOWER COLUMBIA DRAINAGE

WALLA WALLA RIVER

Tollgate	212	32	4N	38E	5070	1-29	90.8	27.1	-	8.2	8.4	14.9	14
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UMATILLA RIVER

Emigrant Springs	222	29	1N	35E	3925	1-29	36.1	10.2	-	3.5	1.7	5.3	17
Lucky Strike	223	28	3S	32E	5050	1-28	41.2	10.4	-	6.0	4.5	6.8	7
Meacham	221	24&25	1S	35E	4300	1-29	41.5	9.6	-	4.6	3.1	5.6	17
Tollgate	212	32	4N	38E	5070	1-29	90.8	27.1	-	8.2	8.4	14.9	14

WILLOW CREEK

Arbuckle Mountain	241	33	4S	29E	5400	2-1	48.3	12.4	-	5.4	3.8	7.0	16
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JOHN DAY RIVER

Arbuckle Mountain	241	33	4S	29E	5400	2-1	48.3	12.4	-	5.4	3.8	7.0	16
Beech Creek Summit	246A	4	12S	30E	4800	1-29	20.3	7.4	5.2	1.6	3.2	3.7	9
Blue Mountain Springs	133	21	15S	35E	5900	1-18	45.2	14.1	11.7	4.9	4.1	9.3	15
Blue Mountain Summit	141	6	12S	36E	5098	1-31	42.4	9.5	6.0	3.4	2.5	5.2	11

STREAM BASINS

LOCATION

SNOW COVER MEASUREMENTS

(Primary & Secondary & Snow Courses)	Oregon Number	Sec.	Twp.	Range	Elev.	Date	About Feb. 1, 1946					Yrs. of rec- ord
							Avg. Snow Depth (In.)	Avg. Water Depth (In.)	One Month Ago (1-1-46)	One Year Ago (2-1-45)	Two Years Ago (2-1-44)	

JOHN DAY RIVER (Cont'd.)

Gold Center	249	21	9S	36E	5340	Measurement	Delayed		-	4.9	4.3	7.0	7
Izee Summit	964	28	16S	29E	5293	1-28	31.8	10.7	9.6	2.3	3.0	5.2	10
Olive Lake	245	14	9S	33 $\frac{1}{2}$ E	6000	1-30	54.3	16.1	9.7	4.6	4.6	8.9	10
Starr Ridge	247B	20	15S	31E	5150	1-28	24.1	8.0	6.4	1.7	2.4	3.6	10

DESCHUTES RIVER

Caldwell Ranch	326	30	21S	8E	4400	1-14	39.3	12.5	-	-	3.2	3.8	5
Cascade Summit	321	7	23S	6E	4880	Measurement	Delayed		-	8.7	7.3	17.6	15
Crescent Lake	325	11	24S	6E	4760	Measurement	Delayed		-	1.9	3.2	7.4	10
Derr	343	14	13S	23E	5670	2-1	37.5	10.5	-	4.2	2.6	5.2	8
Hogg Pass	351	24	13S	7 $\frac{1}{2}$ E	4755	1-31	111.6	42.0	-	9.0	12.4	18.4	8
Marks Creek	344	25	12S	19E	4540	1-30	23.3	7.3	-	1.8	0.3b	2.9	8
New Dutchman Flat	324A	21	18S	9E	6400	1-16	120.4	48.0	-	-	-	15.3	1
Ochoco Meadows	341	21	13S	20E	5200	2-1	43.0	12.8	10.5	4.7	2.7	6.4	16
Rock Creek	362	1	4S	10E	4200	1-31	53.4	14.7	-	-	-	-	-
Three Creeks Meadows	331	3	17S	9E	5600	2-3	58.0	20.0	-	1.6	4.1	10.0	14

SANDY RIVER

Phlox Point-Mt. Hood	452	6	3S	9E	5600	2-1	178.4	63.0	-	10.0	15.0	25.6	8
Still Creek	451	25	3S	8 $\frac{1}{2}$ E	3700	2-4	82.5	28.0	-	2.9	5.0	8.2	8

CLACKAMAS RIVER

Peavine Ridge	591	14&15	6S	7E	3500	2-5	58.2	16.1	9.8	2.7	3.7	7.7	8
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b - Estimated

TABLE				No. of	
Spectra				Observed	
No.				Date	
1	10	1000000000	100	10/11	10
2	10	1000000000	200	10/11	20
3	10	1000000000	300	10/11	30
4	10	1000000000	400	10/11	40
5	10	1000000000	500	10/11	50
6	10	1000000000	600	10/11	60
7	10	1000000000	700	10/11	70
8	10	1000000000	800	10/11	80
9	10	1000000000	900	10/11	90
10	10	1000000000	1000	10/11	100
11	10	1000000000	1100	10/11	110
12	10	1000000000	1200	10/11	120
13	10	1000000000	1300	10/11	130
14	10	1000000000	1400	10/11	140
15	10	1000000000	1500	10/11	150
16	10	1000000000	1600	10/11	160
17	10	1000000000	1700	10/11	170
18	10	1000000000	1800	10/11	180
19	10	1000000000	1900	10/11	190
20	10	1000000000	2000	10/11	200
21	10	1000000000	2100	10/11	210
22	10	1000000000	2200	10/11	220
23	10	1000000000	2300	10/11	230
24	10	1000000000	2400	10/11	240
25	10	1000000000	2500	10/11	250
26	10	1000000000	2600	10/11	260
27	10	1000000000	2700	10/11	270
28	10	1000000000	2800	10/11	280
29	10	1000000000	2900	10/11	290
30	10	1000000000	3000	10/11	300
31	10	1000000000	3100	10/11	310
32	10	1000000000	3200	10/11	320
33	10	1000000000	3300	10/11	330
34	10	1000000000	3400	10/11	340
35	10	1000000000	3500	10/11	350
36	10	1000000000	3600	10/11	360
37	10	1000000000	3700	10/11	370
38	10	1000000000	3800	10/11	380
39	10	1000000000	3900	10/11	390
40	10	1000000000	4000	10/11	400
41	10	1000000000	4100	10/11	410
42	10	1000000000	4200	10/11	420
43	10	1000000000	4300	10/11	430
44	10	1000000000	4400	10/11	440
45	10	1000000000	4500	10/11	450
46	10	1000000000	4600	10/11	460
47	10	1000000000	4700	10/11	470
48	10	1000000000	4800	10/11	480
49	10	1000000000	4900	10/11	490
50	10	1000000000	5000	10/11	500
51	10	1000000000	5100	10/11	510
52	10	1000000000	5200	10/11	520
53	10	1000000000	5300	10/11	530
54	10	1000000000	5400	10/11	540
55	10	1000000000	5500	10/11	550
56	10	1000000000	5600	10/11	560
57	10	1000000000	5700	10/11	570
58	10	1000000000	5800	10/11	580
59	10	1000000000	5900	10/11	590
60	10	1000000000	6000	10/11	600
61	10	1000000000	6100	10/11	610
62	10	1000000000	6200	10/11	620
63	10	1000000000	6300	10/11	630
64	10	1000000000	6400	10/11	640
65	10	1000000000	6500	10/11	650
66	10	1000000000	6600	10/11	660
67	10	1000000000	6700	10/11	670
68	10	1000000000	6800	10/11	680
69	10	1000000000	6900	10/11	690
70	10	1000000000	7000	10/11	700
71	10	1000000000	7100	10/11	710
72	10	1000000000	7200	10/11	720
73	10	1000000000	7300	10/11	730
74	10	1000000000	7400	10/11	740
75	10	1000000000	7500	10/11	750
76	10	1000000000	7600	10/11	760
77	10	1000000000	7700	10/11	770
78	10	1000000000	7800	10/11	780
79	10	1000000000	7900	10/11	790
80	10	1000000000	8000	10/11	800
81	10	1000000000	8100	10/11	810
82	10	1000000000	8200	10/11	820
83	10	1000000000	8300	10/11	830
84	10	1000000000	8400	10/11	840
85	10	1000000000	8500	10/11	850
86	10	1000000000	8600	10/11	860
87	10	1000000000	8700	10/11	870
88	10	1000000000	8800	10/11	880
89	10	1000000000	8900	10/11	890
90	10	1000000000	9000	10/11	900
91	10	1000000000	9100	10/11	910
92	10	1000000000	9200	10/11	920
93	10	1000000000	9300	10/11	930
94	10	1000000000	9400	10/11	940
95	10	1000000000	9500	10/11	950
96	10	1000000000	9600	10/11	960
97	10	1000000000	9700	10/11	970
98	10	1000000000	9800	10/11	980
99	10	1000000000	9900	10/11	990
100	10	1000000000	10000	10/11	1000

STREAM BASINS

LOCATION

SNOW COVER MEASUREMENTS

(Primary & Secondary & Snow Courses)	Oregon Number	Sec.	Twp.	Range	Elev.	Date	About Feb. 1, 1946					Yrs. of rec- ord
							Avg. Snow Depth (In.)	Avg. Water Depth (In.)	One Month Ago (1-1-46)	One Year Ago (2-1-45)	Two Years Ago (2-1-44)	

WILLAMETTE RIVER

Breitenbush	551	21	9S	7E	2325	1-31	16.0	4.3	Trace	0.7	0.2 ^b	3.7	5
Cascade Summit	321	7	23S	6E	4880	Measurement	Delayed		-	8.7	7.3	17.6	15
Champion	522	12	23S	1E	4500	1-31	78.9	28.3	-	3.2	4.4	10.6	7
Hogg Pass	351	24	13S	7 $\frac{1}{2}$ E	4755	1-31	111.6	42.0	24.6	9.0	12.4	18.4	8
McKenzie	531	35	15S	7 $\frac{1}{2}$ E	4800	Measurement	Delayed		-	-	11.4	13.8	4
Marion Forks	553	28	11S	7E	2730	1-31	41.1	13.8	8.5	0.6	1.4	5.6	5
Mary's Peak	541	21	12S	7W	3620	1-28	22.8	8.6	-	4.1	2.0	4.2	6
Santiam Junction	552	14	13S	7E	3990	1-31	72.9	24.5	17.0	3.9	3.8	10.4	5

I N T E R I O R D R A I N A G E

SILVER LAKE

Silver Creek	942	25&26	29S	13E	4900	1-31	17.3	4.9	-	0.0	1.6	2.6	6
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HARNEY BASIN

Deer Creek	973	17	36S	26E	6670	1-29	21.3	5.9	-	-	-	4.6	4
Hart Mountain	971	1	36S	25E	6350	1-28	3.0	0.9	-	-	-	2.6	4
Idylwild Park	961A	33	20S	31E	5200	1-27	28.8	5.5	5.6	2.8	1.2	3.8	13
Izee Summit	964	28	16S	29E	5293	1-28	31.8	10.7	9.6	2.3	3.0	5.2	10
Rock Spring	134	23	18S	32E	5100	1-27	27.3	6.0	5.0	2.7	1.8	4.5	10
Starr Ridge	247B	20	15S	31E	5150	1-28	24.1	8.0	6.4	1.7	2.4	3.6	10

GUANO LAKE

Guano Creek	972	13	36S	25E	6480	1-28	15.6	4.6	-	-	-	4.6	4
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WARNER LAKE

Camas Creek	911A	5	39S	21E	5720	1-28	31.6	9.3	-	5.0	3.8	6.8	7
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STREAM BASINS	LOCATION	SNOW COVER MEASUREMENTS									
		About Feb. 1, 1946		Average Water Depth (Inches)							
(Primary & Secondary & Snow Courses)	Oregon Number Sec. Twp. Range Elev.	Avg.	One	One	Year	Years	Two	Avg.	for	Yrs.	
		Snow	Month	Year	Ago	Ago	Ago	past	of		
		Depth	Ago	Depth	Ago	Ago	Ago	of	rec-		
		(In.)	(In.)	(In.)	(1-1-46)	(2-1-45)	(2-1-44)	record	ord		

W E S T C O A S T D R A I N A G E

UMPQUA RIVER

Champion	522	12	23S	1E	4500	1-31	78.9	28.3	-	3.2	4.4	10.6	7
Diamond Lake	743	29	27S	6E	5315	1-31	80.7	26.1	18.8	4.5	7.4	10.9	9
Goolaway Gap	726	32	32S	3W	3000	1-28	3.9	1.3	-	0.2	1.3	1.8	9
Goolaway Mountain	7215	30	32S	3W	3730	1-28	9.7	2.1	-	1.4	2.3	4.5	9
Whaleback	7217	3	31S	2E	5140	1-31	108.6	45.3	-	-	13.9	18.3	7

ROGUE RIVER

Althouse	7216	17	41S	7W	4400	1-31	11.8	2.5	-	0.8	0.6 ^b	1.8	8
Annie Spring	831	19	31S	6E	6018	1-17	104.9	42.2	-	13.4	14.3	25.1	13
Big Red Mountain	729	31	40S	1W	6500	2-1	68.4	24.6	-	6.6	12.7	16.0	10
Billie Creek Divide	722	30	36S	5E	6000	1-30	76.1	24.8	17.6	9.5	8.3	13.9	14
Fish Lake	725	3	37S	4E	4865	1-31	47.0	16.8	9.1	3.5	4.6	8.2	12
Goolaway Gap	726	32	32S	3W	3000	1-28	3.9	1.3	-	0.2	1.3	1.8	9
Goolaway Mountain	7215	30	32S	3W	3730	1-28	9.7	2.1	-	1.4	2.3	4.5	9
Grayback Peak	727	9	40S	5W	6000	1-30	58.2	18.1	-	3.2	11.6	14.1	10
Hyatt Prairie Reservoir	723	15	39S	3E	4900	1-29	39.3	11.0	6.1	2.2	6.4	6.2	11
Little Red Mountain	7210	25	40S	2W	6500	Not Measured				2.5	9.6	10.5	10
Scragg Mtn. (Calif.)	7220	9	47N	10W	6200	Measurement Delayed			21.3	5.3	11.4	15.4	5
Seven Lakes No. 1	7211	3	34S	5E	6800	Measurement Delayed			-	17.5	20.6	22.2	6
Seven Lakes No. 2	7212	26	33S	5E	6200	Measurement Delayed			-	12.2	13.3	15.2	6
Silver Burn	7219	30	30S	4E	3720	1-31	41.0	11.8	8.2	2.5	5.3	5.7	8
Siskiyou Summit	728	17	40S	2E	4630	1-27	17.0	5.1	3.7	1.2	3.8	4.6	9
South Fork Canal	7218	12	33S	3E	3500	1-30	15.0	2.4	0.0	0.8	Trace	1.5	8
Wagner Butte	7213	1	40S	1W	6900	1-31	44.8	14.6	-	4.3	8.7	9.0	10
Whaleback	7217	3	31S	2E	5140	1-31	108.6	45.3	-	-	13.9	18.3	7

b - Estimated

STREAM BASINS

LOCATION

(Primary & Secondary
& Snow Courses)

Oregon

Number

Sec.

Twp.

Range

Elev.

About Feb. 1, 1946

Yrs.

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SNOW COVER MEASUREMENTS

Average Water

Depth (Inches)

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KLAMATH LAKE BASIN

Annie Spring	831	19	31S	6E	6018	1-17	104.9	42.2	-	13.4	14.3	25.1	13
Beatty 2/		22	36S	12E	4300	1-31	2.8	0.3	0.0	0.0	0.0	0.8	18
Billie Creek Divide	722	30	36S	5E	6000	1-30	76.1	24.8	17.6	9.5	8.3	13.9	14
Chemult No. 1	834	21	27S	8E	4760	1-31	49.4	13.9	9.9	3.7	4.2	7.2	9
Chiloquin 2/		34	34S	7E	4187	1-31	6.0	1.0	0.0	0.0	2.4	2.2	16
Crowder Flat (Calif.)		30	47N	11E	5200	Measurement	Delayed		-	-	1.6	2.8	6
Crystal 2/		26	34S	6E	4200	1-31	31.0	10.8	6.8	3.2	4.4	6.0	16
Fort Klamath 2/		22	33S	7 1/2 E	4150	1-31	7.8	1.8	0.2	1.2	3.6	3.9	19
Hyatt Prairie Reservoir	723	15	39S	3E	4900	1-29	39.3	11.0	6.1	2.2	6.4	6.2	11
Kirk 2/		1	33S	7E	4533	1-31	26.2	11.0	6.2	0.8	4.1	5.0	19
Lake of the Woods No. 1	835	11	37S	5E	4960	1-31	36.7	11.0	9.3	3.3	5.5	4.9	9
Pelican 2/		10	36S	6E	4200	1-31	13.0	3.5	1.4	1.1	3.3	3.7	19
Quartz Mountain	811	2	38S	16E	5320	1-29	28.9	7.9	4.6	4.8	2.3	4.9	16
Quartz Mountain 2/		33	37S	16E	5504	1-31	36.0	10.8	5.9	5.2	3.3	5.1	16
Richardson Ranch 2/		22	35S	14E	4800	1-31	10.2	1.2	0.0	0.2	1.5	2.0	19
Seven Lakes No. 1	7211	3	34S	5E	6800	Measurement	Delayed		-	17.5	20.6	22.2	6
Seven Lakes No. 2	7212	26	33S	5E	6200	Measurement	Delayed		-	12.2	13.3	15.2	6
Sun Mountain	836	22	32S	7 1/2 E	5350	1-31	87.6	33.0	26.5	7.6	8.2	14.6	8
Taylor Butte	842	16	33S	11E	5100	1-30	26.8	8.4	-	1.5	2.3	3.2	9
Yamsey 2/		7	31S	11E	4600	1-31	20.0	7.0	3.8	0.6	-	1.8	15

GOOSE LAKE BASIN

Cams Creek	911A	5	39S	21E	5720	1-28	31.6	9.3	-	5.0	3.8	6.8	7
Quartz Mountain	811	2	38S	16E	5320	1-29	28.9	7.9	4.6	4.8	2.3	4.9	16
Quartz Mountain 2/		33	37S	16E	5504	1-31	36.0	10.8	5.9	5.2	3.3	5.1	16

b - Estimated

1/ The following organizations cooperate in the Oregon snow survey work:

STATE

Idaho Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon State Engineer and corps of State Watermasters
Oregon State Highway Engineers

FEDERAL

Department of Agriculture
 Forest Service
 Soil Conservation Service
Department of Commerce
 Weather Bureau
Department of the Interior
 Bonneville Power Administration
 Bureau of Reclamation
 Fish and Wildlife Service
 Geological Survey
 Indian Service
 National Park Service
War Department
 Army Engineer Corps

PUBLIC UTILITIES

Eastern Oregon Light and Power Company
Portland General Electric Company
The California Oregon Power Company

MUNICIPALITIES

City of Corvallis
City of LaGrande
City of The Dalles

IRRIGATION DISTRICTS

Associated Ditch Companies
Central Oregon Irrigation District
Deschutes County Municipal Improvement District
Grants Pass Irrigation District
Jordan Valley Irrigation District
Lakeview Water Users Incorporated
Medford Irrigation District
Ochoco Irrigation District
Rogue River Irrigation District
Talent Irrigation District
Vale-Oregon Irrigation District
Warm Springs Irrigation District

PRIVATE CORPORATIONS

Amalgamated Sugar Company

2/ Water content determined by melting a measured sample.
(The California Oregon Power Company's station)

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